

HIGHLY IMPACT-RESISTANT STEEL PIPE
AND METHOD FOR PRODUCING THE SAME

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ABSTRACT OF THE DISCLOSURE

10 The present invention provides: a highly impact-
resistant member having a round or square sectional
shape, that is excellent in strength and toughness, does
not undergo the deterioration of toughness in the
vicinity of the welded portion, and a highly impact-
15 resistant steel pipe having a tensile strength TS of
1,700 MPa or more and a yield ratio YR of 72% or less,
said yield ratio being the ratio of a 0.1%-proof stress
YS to a tensile strength TS (YS/TS). The toughness of
the welded portion of said steel pipe is enhanced by
controlling the Si amount in the steel of said steel pipe
20 in the range from $Mn/8 - 0.07$ to $Mn/8 + 0.07$. Said steel
contains, in mass, 0.19 to 0.35% C, 0.10 to 0.30% Si, 0.5
to 1.60% Mn, not more than 0.025% P, not more than 0.01%
S, 0.010 to 0.050% Al, 2 to 35 ppm B and 0.005 to 0.05%
Ti as indispensable components. Said steel pipe
25 according to the present invention comprises a steel
wherein 95% or more of the microstructure of said steel
is transformed into martensite by subjecting said steel
pipe to induction heating and then water quenching at a
cooling rate of 100°C or higher and the prior austenite
30 grain size number of said steel is #6 or more. The
present invention includes methods for producing said
steel pipe.